#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Filing Date:

Applicant:

Kazem F. Sabet et al.

**Group Art Unit:** 

Examiner:

Title:

**MULTIFUNCTION ANTENNA** 

Attorney Docket:

**EMAG-00003CC** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

## I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. COPIES

- A. \_\_\_ Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.
- B. X Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

<u>U.S. Serial Number</u> 10/084,576

<u>U.S. Filing Date</u> 2-27-2002

	CThis is a PCT application States. A copy of the Internation information. The documents list on the attached Form-1449 for any patent resulting from this apwas from the US, EPO, or JPO should have been supplied to the believed to be in the file of the attached.	nal Search Report is attach ed on the International Search Seconsideration by the Examplication. Since the International Search authorities, copies USPTO under the trilater pove-identified application.	ed for the Examiner's arch Report are listed iner and for listing on ational Search Report of these references al agreement and are (MPEP 1893.03(g))
III.	CONCISE EXPLANATION OF T	<u>HE RELEVANCE</u> (check <u>at</u>	: least one box)
	A Except as may be indicat other information are in the Engli	* * *	
	B A concise explanation of other information listed that is not c.f.R. § 1.98(a)(3)):	•	•
	1See the attached for 2See the attached for		
	C The following additiona consideration.	I information is provided	for the Examiner's
IV.	CROSS REFERENCE TO RELA	TED APPLICATION(S)	
	A. X The Examiner is advise contain(s) subject matter that r bringing this(these) application does(do) not waive the confident	may be related to the pre (s) to the Examiner's a	sent application. By ttention, Applicant(s)
	<u>Serial No.</u> 10/084,576	Filing Date 2-27-2002	Art Unit 2821

## V. THIS IDS IS BEING FILED UNDER

A. X 37 C.F.R. § 1.97(b): (check only one box)

1. X within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

<ol> <li>within three months of the date of entry of the national stage as se forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.</li> </ol>
3 before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposition account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
4 before the mailing of a first Office Action after the filing of a reques for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.
B 37 C.F.R. § 1.97(c): (check <u>only</u> one box)
<ul> <li>before the mailing date of either any Final Office Action under 37 C.F.R</li> <li>§ 1.113, a Notice of Allowance under 37 C.F.R.</li> <li>§ 1.311, or an action that otherwise closes prosecution.</li> </ul>
1 No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
2 See the certification below. No fee is required.
C 37 C.F.R. § 1.97(d):
<ul> <li>after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.</li> </ul>
1 See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
The undersigned hereby certifies that:
A each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)); or
B no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of the contained in this IDS was cited in a communication from a foreign patent of the communication.

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VI.

Serial No.

information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. \_\_\_ Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

#### VII. PAYMENT OF FEES (check only one box)

- A. \_\_\_\_ A check in the amount of \$180.00 is enclosed for the above-identified fee.
- B. \_\_\_\_ Please charge Deposit Account No. 501612 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 501612.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 501612.

Respectfully submitted.

Bv:

Por No. Willer

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Fax: (248) 364-4285

Dated: 9/29/03

JAM/cac

Serial No.

## FORM -1449 (Based on Form PTO-1449)

## PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET NO.	SERIAL NO.	
EMAG-00003CC		
APPLICANT		
Kazem F. Sabet et al.		
FILING DATE	GROUP	

U.S. P	U.S. PATENT DOCUMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		6,081,239	06-2000	Sabet et al.		
2.		6,023,214	02-2000	Ohta et al.		
3.		5,929,825	07-1999	Niu et al.		
4.		5,914,693	06-1999	Takei et al.		
5.		5,892,480	04-1999	Killen		
6.		5,808,586	09-1998	Phillips et al.		
7.		5,714,961	02-1998	Kot et al.		
8.		5,706,015	01-1998	Chen et al.		
9.		5,539,420	01-1996	Dusseux et al.		
10.		5,530,358	06-1996	Wisler et al.		
11.		5,489,913	02-1996	Raguenet et al.		
12.		5,353,035	10-1994	Del Castillo Cuervo- Arango et al.		
13.		5,194,876	03-1993	Schnetzer et al.		
14.		5,155,493	10-1992	Thursby et al.		
15.		5,087,922	02-1992	Tang et al.		
16.		5,068,670	11-1991	Maoz.		
17.		4,839,663	06-1989	Kurtz		
18.		4,672,386	06-1987	Wood		
19.		4,313,120	01-1982	Westerman		
20.		3,638,226	01-1972	Brooks et al.		
21.		3,031,665	12-1959	G. Robert-Pierre Marie		

Examiner:	Date Considered:

## FORM 1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

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Sheet 2 of Error! Reference source not found.

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U.S. P	ATENT DO	CUMENTS				
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
22.		2,863,145	10-1955	E.M. Turner		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translatio Yes	n No
1.		WO 98 49742	11-1998	WIPO			
2.		JP 10 135727	08-1998	Japanese Patent Publication			

OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)				
Ref. Desig.	Examiner's Initials				
1.		Nurnberger, M.W., et al., "A New Planar Feed for Slot Spiral Antennas", IEEE Transactions on Antennas and Propagation, US, IEEE Inc., New York, vol. 44, no. 1, 1996, pgs. 130-1331.			
2.		Nakano, H., et al., "Two-Arm Slot Spiral Antenna", Electromagnetics, Hemisphere Publishing Co., vol. 14, no. 3/04, 1 July 1994, pgs. 397-413.			
3.		Hirose, K., et al., "Monofilar Archimedean Spiral Slot Antennas", Electromagnetics, Hemisphere Publishing co., vol. 14, no. 3/04, 1 July 1994, pgs. 415-426.			

Examiner:	Date Considered: